

I

Page 245

133 S.W.3d 245 (Tex. 2004)

KERR-McGEE CORPORATION, et al.

v.

Jimmy HELTON, et al.

No. 02-0356.

Supreme Court of Texas

January 30, 2004.

Argued Jan. 22, 2003.

Rehearing Denied May 7, 2004.

Page 246

[Copyrighted Material Omitted]

Page 247

J. Harrell Feldt, Vinson & Elkins, Houston, S. Tom Morris, Underwood Wilson Berry Stein & Johnson, P.C., Amarillo, for petitioner.

Robert D. Lemon, Guy Kelly Cooksey, Otis C. Shearer, Lemon Shearer Phillips & Good, P.C., Perryton, for respondent.

Justice SMITH delivered the opinion of the Court, in which Chief Justice PHILLIPS, Justice HECHT, Justice OWEN, Justice JEFFERSON, Justice SCHNEIDER, Justice WAINWRIGHT, and Justice BRISTER joined.

Oil and gas lessors brought suit against lessee for breach of the implied covenant to protect the leasehold against drainage. The case was tried to the bench. At trial, lessors' sole evidence of the amount of damages was the expert testimony of Michael Riley. After cross-examining Riley, lessee objected and moved to strike Riley's testimony as unreliable. The trial court denied the motion and, at the close of trial, rendered judgment for lessors. Concluding, among other things, that the evidence was legally sufficient to support the damages award, the court of appeals affirmed. --- S.W.3d ----, 2002 WL 110433 We conclude that Riley's testimony regarding the amount of damages is unreliable and is therefore no evidence. Accordingly, because lessors failed to present any competent evidence on an essential element of their cause of action, we reverse the court of appeals' judgment and render judgment that lessors take nothing.

Kerr-McGee Corporation acquired sixty-one oil and gas leases from the respondents, who consist of sixty-nine individuals, estates, and trusts (collectively referred to as "Helton"). The leases cover all of Section

Page 248

10, Block R.E., Roberts and Eddleman Survey, in Wheeler County.[1] Kerr-McGee pooled the leases effective March 28, 1994. Kerr-McGee also owned leases in several sections of the West Park Field surrounding section 10.[2]

In September 1993, Kerr-McGee began drilling a wildcat well in section 17, which is directly south of section 10. This well, Holmes 17-1, was a deep gas well in the West Park Field, Upper Morrow formation of the Anadarko Basin. It was completed on December 4, 1993. Holmes 17-1 was located 660 feet from the northern and western boundary lines of section 17. It encountered approximately 73 feet of the previously unknown Lower Puryear zone in the Upper Morrow formation and was a very profitable well, producing approximately 8.7 Bcf (billion cubic feet) of gas over its lifetime.

After Holmes 17-1 was drilled, Kerr-McGee drilled several additional wells in the West Park Field, including two wells in section 10 (Mitchell 10-1 and Mitchell 10-2). Mitchell 10-1, which was located 1600 feet from the southern boundary line of section 10, was completed in August 1994, and encountered no Lower Puryear. Kerr-McGee next drilled the Eden 11-1 well in section 11, which is directly west of section 10. Kerr-McGee placed this well 467 feet from the eastern and southern boundary lines of section 11, as close as spacing rules[3] would allow to the boundary lines, thereby placing the Eden 11-1 as close as possible to Holmes 17-1. Eden 11-1 encountered 7 feet of Lower Puryear. It was completed in January 1995 in another zone, the Puryear, and will make a reasonable profit.

After completing a seismic survey, Kerr-McGee drilled the Zybach 16-1 well in section 16, the section southwest of section 10. Zybach 16-1 was spudded in February 1996 near the southern boundary line of section 16. It encountered no Lower Puryear. Kerr-McGee then returned to section 10 to drill an additional well, Mitchell 10-2, in June 1996. Although Mitchell 10-2 was 467 feet from the southern boundary line of section 10, it was 2300 feet from the western boundary line, and thus was not very close to Holmes 17-1. Mitchell 10-2 encountered approximately 7 feet of Lower Puryear, was completed in the Lower Puryear and two other zones, and was a marginal producer. It will not make a profit.

In December 1996, Kerr-McGee completed a second

well in section 16. This well, Fleetwood Trust 16-1, was located west of Holmes 17-1, 467 feet from the eastern boundary line of section 16. Fleetwood Trust 16-1, which was placed as close as possible to Holmes 17-1, encountered approximately 79 feet of Lower Puryear, produced approximately 7.0 Bcf of gas, and was also a very profitable well. Kerr-McGee drilled three additional wells in the West Park Field, for a total of nine wells.[4]

The parties agree that, in the Upper Morrow formation in the Anadarko Basin,

Page 249

hydrocarbon-bearing rock and sands were deposited by streams and rivers and are therefore difficult to find. The area is extremely difficult to map, and deposits are easily missed. Of the nine wells Kerr-McGee drilled in the West Park Field, four wells--Holmes 17-1, Eden 11-1, Mitchell 10-2, and Fleetwood Trust 16-1--encountered the same Lower Puryear reservoir. Holmes 17-1 and Fleetwood Trust 16-1, which were located in the thick part of the reservoir, were both very profitable within that formation.

Although two wells were drilled in section 10, Helton brought suit claiming that Kerr-McGee breached its implied covenant to protect section 10 from drainage from the Holmes 17-1 well. Helton alleged that an offset well should have been drilled in section 10, much nearer to Holmes 17-1 than the Mitchell 10-1 and 10-2 wells, and that a reasonably prudent operator would have had the offset well producing by February 1, 1995. According to Helton, the offset well should have been drilled 467 feet from the southern boundary line and 660 feet from the western boundary line of section 10, placing it 1127 feet directly north of Holmes 17-1. Helton asserts that a reasonably prudent operator who owned only the leases in section 10 would have drilled a protection well as close as possible to a known producer such as Holmes 17-1, but that Kerr-McGee had no economic incentive to do so because it owned leases in the surrounding sections. According to Helton, Kerr-McGee drilled the Mitchell 10-1 and 10-2 wells farther away from Holmes 17-1 in an attempt to find another Lower Puryear deposit rather than to protect section 10 from drainage by Holmes 17-1.

Helton argued that, if drilled as close as possible to Holmes 17-1, the hypothetical offset well would have encountered the same Lower Puryear reservoir as Holmes 17-1 and would have been very profitable. Dr. Dennis Kerr, Helton's petroleum geology expert, testified that the Lower Puryear reservoir from which Holmes 17-1 and Fleetwood Trust 16-1 were draining extended north to the location of the hypothetical offset well, and that there would be approximately 60 feet of Lower Puryear reservoir at that location. Kerr-McGee does not dispute this evidence on appeal.

To establish liability and damages, Helton offered the expert testimony of Michael Riley, a petroleum

engineer. Riley's testimony was presented to establish the amount of gas the hypothetical offset well would have produced, that a reasonably prudent operator would have drilled the well, and the amount of royalties Helton would have received. It is undisputed that Helton's "claims for damages have been and are based solely on the royalties that the hypothetical protection well would have yielded [Helton] had it been timely drilled." Although Kerr-McGee challenged the measure of damages in the trial court, arguing that damages should be measured by the amount of gas drained rather than what the hypothetical well would have produced, Kerr-McGee does not challenge Helton's measure of damages on appeal. Riley testified that the hypothetical offset well would have produced approximately 6.1 Bcf of gas, and that Helton, who owned a 3/16 royalty interest, would have received \$2,149,299.60.

During cross-examination, Riley testified that he based his projection of the hypothetical well's production on the assumption that the hypothetical well would have produced at the same rate as the Holmes 17-1 well until the Fleetwood Trust 16-1 well began producing, and then the three wells would have produced at the same rate until the reservoir was depleted.

Page 250

When asked if the production from these wells would tell him what the hypothetical well would have produced, he answered: "No, it does not." Further, Riley was asked, "[Y]ou simply do not have any factual basis for projecting the production of that hypothetical well, do you?" He responded, "That is correct." Immediately after Riley was cross-examined and dismissed, Kerr-McGee objected to Riley's testimony as unreliable and moved to strike. The trial court denied the motion. Riley was recalled twice, once during Helton's case-in-chief and once in rebuttal.

Kerr-McGee presented four expert witnesses regarding liability. Ronald Platt, a petroleum engineer, opined that Holmes 17-1 had not drained a substantial amount of gas from underneath section 10. He further opined that the hypothetical offset well would not have produced sufficient gas to recover the costs of drilling and completion (approximately \$1.5 million) and, therefore, a reasonably prudent operator would not have drilled the well. In support of those opinions, Platt testified that: (1) the original gas in place in the entire Lower Puryear reservoir was 17.8 Bcf; (2) the original gas in place in the Lower Puryear reservoir below section 10 was .4 Bcf; and (3) the value of the recoverable gas in the Lower Puryear reservoir below section 10 was \$640,000. Kerr-McGee's other experts also testified that a reasonably prudent operator would not have drilled the hypothetical well.

At the close of Helton's case-in-chief, Kerr-McGee filed a motion for judgment as a matter of law.

Kerr-McGee argued, among other things, that: "Plaintiffs have wholly failed to sustain their burden of proof as to the amount of their damages, if any. There is no competent evidence from which the amount of damages, if any, can be computed." After the close of all the evidence and before the trial court announced a decision, Kerr-McGee filed a motion for judgment, again asserting that there was no competent evidence to support a finding of damages. The trial court denied both motions.

The trial court issued findings of fact and conclusions of law. In its findings of fact, the trial court found that "[Kerr-McGee] breached the implied covenant under the Section 10 oil and gas leases to protect that portion of the Lower Puryear interval of the Upper Morrow formation in and under Section 10 from substantial drainage." It further found that: (1) "[t]he Holmes 17-1 well drained substantial volumes of gas from underneath Section 10 during 1994"; (2) "[a] reasonably prudent operator owning the oil and gas leases covering Section 10 would have commenced drilling a protection well 660 feet from the West line and 467 feet from the South line of Section 10 in sufficient time to have such well producing gas by February 1, 1995"; and (3) "[t]he hypothetical protection well would have paid out in a reasonable time and would have made a reasonable profit for the lessee after deducting the costs of drilling, completing, operating and marketing." The trial court awarded \$863,649.36 as lost royalties (\$840,910.51 in royalties from February 1, 1995 to March 16, 2001 and \$22,738.85 for future damages after March 16, 2001).[5]

After the trial court rendered judgment for Helton, Kerr-McGee filed a motion to modify the judgment or for new trial, arguing, among other things, that there was no competent evidence to support the trial

Page 251

court's findings on the amount of damages. Kerr-McGee also filed a request for additional findings of fact on the volume of gas drained, the dollar value of that gas, and the monthly volume and value of the gas upon which the trial court calculated damages. The trial court denied Kerr-McGee's motion to modify the judgment or for new trial and did not issue additional findings. Kerr-McGee filed a timely notice of appeal.

The court of appeals affirmed. --- S.W.3d ----, 2002 WL 110433. Citing *Southeastern Pipe Line Co. v. Tichacek*, 977 S.W.2d 393 (Tex.App.-Corpus Christi 1998), *rev'd on other grounds*, 997 S.W.2d 166 (Tex.1999), the court of appeals concluded: "Thus, while Riley's opinion may not be absolute, we believe there is some factual basis to support his opinion as to the amount of damages. The determination as to the credibility of that opinion is to be made by the trier of fact." --- S.W.3d at ----, 2002 WL 110433 at *5. The court of appeals did not analyze or otherwise address whether Riley's testimony

was reliable under this Court's established jurisprudence regarding expert testimony.

Kerr-McGee filed a petition for review asserting that Riley's testimony is "unreliable, incompetent and inadmissible" and there is no evidence "to support an award of damages or to support the amount of damages awarded." Kerr-McGee asserts that the petition "presents one overarching issue, i.e., whether there is any reliable evidence to prove the volume of gas the proposed protection well would have produced and thus, whether there is any evidence to support an award of damages, including the amount found by the trial court."

Kerr-McGee states that it assumes, "for purposes of argument, that the basic liability findings, other than the amount of damages, were supported by legally sufficient evidence." Kerr-McGee states, however, that although these facts are assumed for purposes of argument, they were vigorously contested and denied in the trial court. Because Kerr-McGee assumes, for purposes of appeal, that the basic liability findings other than the amount of damages are supported by some evidence, we shall do the same.

II

Before reaching the merits, we consider several preservation-of-error issues raised by Helton. Specifically, Helton complains that Kerr-McGee's objection was untimely, that Kerr-McGee waived its complaint by failing to object to certain exhibits, and that Kerr-McGee's objection was not sufficiently specific to preserve a challenge to Riley's methodology. To preserve error for appeal, a party must make a timely, specific objection or motion to the trial court that states the grounds for the ruling sought with sufficient specificity and complies with the rules of evidence or procedure. TEX. R. APP. P. 33.1.

A

Helton first complains that Kerr-McGee's motion to strike Riley's testimony was untimely. Helton contends that, to preserve its no-evidence challenge to Riley's testimony based on reliability, Kerr-McGee was required to object to the testimony before it was admitted, either before trial or after taking the witness on voir dire. Thus, Helton concludes, by waiting until after cross-examination to object, Kerr-McGee failed to preserve its appellate complaint that the testimony was unreliable, and thus no evidence.

In *Maritime Overseas Corp. v. Ellis*, 971 S.W.2d 402, 409 (Tex.1998), we held that "[t]o preserve a complaint that scientific evidence is unreliable and thus, no evidence,

Page 252

a party must object to the evidence before trial or when

the evidence is offered." We did not consider whether a motion to strike after cross-examination would be sufficient to preserve error; we held only that an objection made after the jury verdict comes too late. In *Guadalupe-Blanco River Authority v. Kraft*, 77 S.W.3d 805, 807 (Tex.2002), we revisited the preservation issue and concluded that an objection made when the witness began his testimony was timely. Thus, Kerr-McGee was not required to object before trial.

Relying on Texas Rule of Evidence 705(b), Helton contends that Kerr-McGee should have conducted a *voir dire* examination and objected before Riley's testimony was admitted. Rule 705(b) provides: "Prior to the expert giving the expert's opinion or disclosing the underlying facts or data, a party against whom the opinion is offered upon request ... in a civil case may ... be permitted to conduct a *voir dire* examination directed to the underlying facts or data upon which the opinion is based. This examination shall be conducted out of the hearing of the jury." TEX. R. EVID. 705(b). Kerr-McGee, however, relies on Rule 705(a) to establish that its motion to strike following cross-examination was timely. Rule 705(a) provides that "[t]he expert may in any event disclose on direct examination, or be required to disclose on cross-examination, the underlying facts or data." TEX. R. EVID. 705(a). According to Kerr-McGee, because Rule 705(a) contemplates that the party against whom the evidence is offered may elicit testimony regarding the underlying facts or data on cross-examination, a motion to strike the testimony after such cross-examination is timely.

As we explained in *Maritime Overseas v. Ellis*, requiring a reliability objection during trial prevents trial or appeal by ambush: "Without requiring a timely objection to the reliability of the scientific evidence, the offering party is not given an opportunity to cure any defect that may exist, and will be subject to trial and appeal by ambush." *Maritime Overseas*, 971 S.W.2d at 409. To hold otherwise, we reasoned, is "simply unfair" because the offering party "relied on the fact that the evidence was admitted." *Id.* In this case, Helton was not subjected to "trial or appeal by ambush." Kerr-McGee objected to the testimony immediately after cross-examination, when the basis for the objection became apparent, and Helton had the opportunity to respond to the objection when Riley was recalled. Accordingly, we conclude that Kerr-McGee's motion to strike after cross-examination was sufficient to preserve its no-evidence complaint on appeal.

B

Helton further suggests that Kerr-McGee failed to preserve its no-evidence complaint by allowing Helton to admit, without objection, two exhibits (16 and 21) demonstrating Riley's estimates of the gas production of the hypothetical well. We find no merit in this argument. It is true that Kerr-McGee's motion to strike did not

encompass the exhibits; it was directed to Riley's testimony. But Kerr-McGee is not challenging the admissibility of those exhibits on appeal. Rather, it is making a no-evidence challenge to Riley's testimony. We have concluded that Kerr-McGee preserved its no-evidence complaint by timely objecting to Riley's testimony based on reliability. If Riley's opinion is found to be unreliable, and thus no evidence, exhibits 16 and 21, which are merely representations of Riley's opinion, would be no evidence for the same reasons.

C

Last, Helton contends that, even if timely, Kerr-McGee's objection in the trial

Page 253

court was more limited than Kerr-McGee's argument on appeal. Helton contends that "[a]n expert's opinion may be unreliable in two different ways: (1) the factual foundation is unreliable or (2) improper methodology is used based on reliable facts." According to Helton, Kerr-McGee's trial objection was solely that Riley's testimony was based upon an unreliable factual foundation, and therefore Kerr-McGee cannot challenge Riley's methodology on appeal.

In its cross-examination, Kerr-McGee probed the basis for Riley's opinion on damages. After Riley admitted that he had no factual basis for his projections, Kerr-McGee's counsel objected:

[COUNSEL]: At this point, Your Honor, the Defendant would move to strike the testimony of Mr. Riley, with respect to damages, on the grounds that by his own admission, his estimate, his numbers, on damages are purely estimates and are not based upon any factual foundation.

And, of course, as this Court knows, for an expert's opinion to be admissible and to constitute competent evidence, it must have a reliable factual foundation. And by his own admission, he has stated that those are estimates of what might have been produced if the theories about the hypothetical well are correct. And that does not constitute a factual foundation upon which an expert opinion can be based. Therefore, we move to strike his testimony as to damages.

Also on the grounds of incompetence. It is not within his scope of his [expertise] or based upon an adequate factual foundation.

... The question is whether Mr. Riley's estimate of the production from the hypothetical well is based upon any foundation of fact. And we submit that it is not.

It is clear that Kerr-McGee was objecting on the basis that Riley's opinion was not sufficiently supported with facts or data, and that is the basis for Kerr-McGee's

no-evidence challenge in this Court.

III

An oil and gas lessee has an implied obligation to protect the leasehold from drainage. *Amoco Prod. Co. v. Alexander*, 622 S.W.2d 563, 567 (Tex.1981). Local drainage occurs when oil migrates from under a lease to the well bore of a producing well on an adjacent lease. *Id.* Drainage may be prevented by drilling an offset well. *Id.* To establish a breach of the implied covenant to protect against drainage, a lessor must show proof (1) of substantial drainage from the lessor's field, and (2) that a reasonably prudent operator would have acted to prevent the drainage. *Id.* at 568.

Once the lessor has established a breach of the implied covenant to protect against drainage, the lessor is entitled to damages. One measure of damages is the amount of royalties that the lessor would have received from the offset well on its lease. *See Tex. Pac. Coal & Oil Co. v. Barker*, 117 Tex. 418, 6 S.W.2d 1031, 1038 (1928) (discussing other cases that "announce the correct doctrine which requires the lessee to pay the lessor the amount he actually loses by awarding him, without deduction, the full value of royalty lost to him through the lessee's failure to exercise ordinary care to either develop the minerals in the leased premises or to protect same from drainage by nearby wells").

Kerr-McGee does not challenge the trial court's findings that there was substantial drainage, that a reasonably prudent operator would have drilled the hypothetical offset

Page 254

well, or that the well would have been profitable. Kerr-McGee challenges only Helton's evidence of the amount of damages, arguing that Riley's testimony is unreliable, and therefore no evidence supports the damages awarded by the trial court.

A

When reviewing a no-evidence challenge, we "view the evidence in a light that tends to support the finding of the disputed fact and disregard all evidence and inferences to the contrary." *Bradford v. Vento*, 48 S.W.3d 749, 754 (Tex.2001). In determining whether an expert's testimony constitutes some evidence, however, "an expert's bare opinion will not suffice" and "[t]he substance of the testimony must be considered." *Merrell Dow Pharms., Inc. v. Havner*, 953 S.W.2d 706, 711 (Tex.1997). Further, "[t]he underlying data should be independently evaluated in determining if the opinion itself is reliable." *Id.* at 713; *Guadalupe-Blanco River Auth. v. Kraft*, 77 S.W.3d 805, 808 (Tex.2002). The proponent of the evidence bears the burden of demonstrating that the expert's opinion is reliable. *E.I. du Pont de Nemours & Co. v. Robinson*, 923 S.W.2d 549,

557 (Tex.1995). If the expert's testimony is not reliable, it is not evidence. *Havner*, 953 S.W.2d at 713.

The reliability requirement focuses on the principles, research, and methodology underlying an expert's conclusions. *Exxon Pipeline Co. v. Zwahr*, 88 S.W.3d 623, 629 (Tex.2002). Under this requirement, expert testimony is unreliable if it is not grounded "in the methods and procedures of science" and is no more than 'subjective belief or unsupported speculation.' " *Id.* (quoting *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 590, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993)). Expert testimony is also unreliable if the court concludes that "there is simply too great an analytical gap between the data and the opinion proffered." " *Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713, 726 (Tex.1998) (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997)). In reviewing the reliability of expert testimony, the court is not to determine whether the expert's conclusions are correct; rather, the court should determine only whether the analysis used to reach those conclusions is reliable. *Zwahr*, 88 S.W.3d at 629 (citing *Gammill*, 972 S.W.2d at 728).

B

Long before *Robinson*, Texas courts required that evidence of drainage be based upon more than mere speculation. *Barker*, 6 S.W.2d at 1034. Although estimating the production of a hypothetical well necessarily involves circumstantial evidence, for the lessor to recover damages, "[t]he amount and value of oil or gas production, obtained or obtainable through reasonable diligence, must be definitely alleged, and must be proven with reasonable certainty before damages may be allowed." *Id.* As in any case seeking recovery of lost profits, recovery does not require that the loss be susceptible of exact calculation. *Holt Atherton Indus., Inc. v. Heine*, 835 S.W.2d 80, 84 (Tex.1992). But, at a minimum, opinions or estimates of lost profits must be based on objective facts, figures, or data from which the amount of lost profits can be ascertained. *Id.*

Riley testified that he looked at numerous accepted sources, such as well logs, base maps, production information, Railroad Commission records, and scout cards, to obtain data about the area and the wells surrounding the hypothetical well's location. Riley testified that if the hypothetical offset well had been drilled and placed in production in February 1995,

Page 255

it and Holmes 17-1 would have produced at the same rate, approximately 8 Mcf of gas per day (the rate that Holmes 17-1 was producing at that time), and that the rate would have declined "at a certain rate" (depicted in exhibit 16) until February 1997, when production would have been approximately 4 Mcf per day. At that point,

Fleetwood Trust 16-1 would have gone into full production, and the production rates of all three wells would have declined more steeply until the reservoir was depleted.

As noted, Kerr-McGee does not dispute on appeal Dr. Kerr's testimony that the Lower Puryear reservoir encountered by Holmes 17-1, Eden 11-1, Mitchell 10-2, and Fleetwood Trust 16-1 extended below section 10, and that the hypothetical offset well would have had approximately 60 feet of Lower Puryear beneath it. But Kerr-McGee argues: "Crediting the geological testimony of Dr. Kerr that the hypothetical well site would have 60 feet of Lower Puryear, one might guess that the well would produce some gas, but the issue is not whether it would produce--the issue is *how much it would produce*." (Emphasis in original.) Kerr-McGee complains that Riley's assumption that the hypothetical well would have produced at the same rate as Holmes 17-1 and later Fleetwood Trust 16-1 is insupportable. According to Kerr-McGee, Riley's assumption is contrary to the actual facts because production records show that Holmes 17-1 and Fleetwood Trust 16-1 did not produce at the same rate. Kerr-McGee also asserts that the hypothetical well, with 60 feet of Lower Puryear, would likely not produce the same as Holmes 17-1 and Fleetwood Trust 16-1, which had 73 feet and 79 feet of Lower Puryear, because, all other factors being equal, thickness determines a well's productivity. In sum, Kerr-McGee contends that it is not reasonable to assume that the wells would have produced at the same rate.

Kerr-McGee cross-examined Riley on these issues as follows:

Q. As a Petroleum Engineer, Mr. Riley, assuming all factors are equal, except the thickness of the reservoir, would the wells produce at the same rate?

A. Not assuming all things are equal, no.

Q. So, if everything is equal, except the thickness of the reservoir, the thick reservoir is going to produce at a higher rate. The well in the thicker reservoir is going to produce at a higher rate, isn't it?

A. Yes.

Q. All right. Well, we know that Holmes and Fleetwood had different thicknesses of reservoirs, don't we?

A. That is correct.

Q. And we know from the production histories that they produced at a different rate--

A. That is correct.

Q. --don't we? So, how is it then, that you theorize that this hypothetical well with an unknown thickness of

formation, would produce at the same rate as Holmes and Fleetwood?

A. Because not all other things are equal.

Q. If it's thinner, then it's certainly not going to produce at the same rate, is it?

A. I can't say that for sure. There are other factors in the reservoir. Your water saturation affects your permeability. Your skin damage from the invasion of drilling fluids into the well bore can

Page 256

drastically affect your flow capacity of the well.

Q. And the porosity would certainly affect it, wouldn't it?

A. The porosity is somewhat linked to the permeability--

Q. A well with 18% porosity would not produce at a greater rate than one with 10% porosity?

A. As I stated earlier, there seems to be a--appear to be a relationship between permeability and porosity and it is not the porosity that causes the increase in production. It's the permeability.

Q. Well, whatever that is, we don't know any of that about this hypothetical well, do we?

A. No.

Q. So you don't have any of those factors as real factors upon which to base your theory, that it would have produced at the same rate as Holmes and Fleetwood, do you?

A. We have some indications.

Q. But you don't have any real data, do you?

A. Not on the hypothetical well.

Q. All of it has to be based on assumptions, doesn't it?

A. Yes.

Q. And none of those assumptions are supportable, that is, you cannot verify any of those assumptions, can you?

A. Yes.

Q. Which ones can you verify?

A. I was able to verify the skin damage in the Holmes 17-1.

Q. But you don't know whether there would be any skin damage in the hypothetical well, do you?

A. No.

Q. So you can't verify that it would have the same skin damage problem that the Holmes well had, can you?

A. No.

Q. Was there any other factor that you think you can verify?

A. No.

Q. All right. So, the net result is that, as to your opinion as to the productivity of the hypothetical well, is purely assumptions based upon no empirical data, isn't it?

A. No empirical data, yes.

Q. Yes. So it's not founded upon any fact, provable fact, is it, Mr. Riley?

A. Yes, I think there are some provable facts.

Q. Well, which ones are they? That's what I'm trying to find out. What is the provable fact upon which you can base that opinion?

A. The fact that the Holmes has significant skin damage to it?

Q. But you just got through admitting that you don't know whether the hypothetical well would have any skin damage, or not, do you? Didn't you admit that?

A. Yes.

Q. So we know nothing about what this hypothetical well would have in that respect do we?

A. The answer--

Q. Excuse me. Do we, or do we not?

A. No.

Q. Now then, I am searching for any provable fact, a fact as to which you have proof upon which you can base your opinion as to the productivity of the hypothetical well.

Page 257

A. I do not know the productivity of the hypothetical well.

Q. But that's what you based your entire damage calculations on in this case, is that that well would have produced 6.1 Bcf of gas had it been drilled and commenced production as of February 1, 1995, isn't it?

A. Yes, I did.

Q. And you have absolutely no factual data upon which to support that opinion, do you Mr. Riley?

A. There are--the only fact I have to base that on is what the wells in the immediate area are producing.

Q. Okay. And that does not tell you what the hypothetical well would have produced, does it?

A. No, it does not.

Q. All right. So back to my statement a moment ago, and to be completely honest, and I think you are, that you simply do not have any factual basis for projecting the production of that hypothetical well, do you?

A. That is correct.

Q. Okay. It's purely unsupported assumption, or estimation, isn't it?

A. No.

As Kerr-McGee admits, assuming there were 60 feet of thickness of Lower Puryear below the hypothetical well, one "might guess" that the well would have produced some gas. And, it is possible that the hypothetical well would have produced as much as Riley projected. But our task is not to determine whether Riley's opinion regarding the hypothetical well's productivity is correct. Rather, we must determine whether the analysis Riley used to reach his conclusions was reliable. Based on this record, there is simply "too great an analytical gap between the data and the opinion" to conclude that it is. As in *Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713, 727 (Tex.1998), the gap in Riley's analysis was his "failure to show how his observations, assuming they were valid, supported his conclusions."

Although Dr. Kerr estimated that the hypothetical well had fewer feet of Lower Puryear reservoir beneath it than Holmes 17-1 and Fleetwood Trust 16-1, Riley opined that the hypothetical well would have produced at the same rate as those wells and would have ultimately produced approximately 6.1 Bcf of gas. Riley admitted that, all other factors being equal, a well with more thickness will have greater production than a well with less thickness. When questioned as to why the hypothetical well, with fewer feet of Lower Puryear, would perform as well as the two wells with more thickness, Riley testified that skin damage, which had been a problem for the Holmes 17-1 well, could have been prevented with techniques learned in drilling Holmes 17-1. He also testified that the hypothetical well would have been drilled in an "up-dip" location, about twenty-five feet structurally higher than Holmes 17-1, and therefore would water out later than Holmes 17-1. While both may be true, Riley failed to testify with any

specificity how these factors affected his calculations. In addition, although Riley testified that he had "some indications" about the permeability or porosity of the hypothetical well, he did not testify what those indications were, whether he attempted to estimate the permeability or porosity of the hypothetical well, or whether those factors affected his production estimates, if at all.

Thus, although Riley examined facts and data that would be appropriate in reaching an opinion as to damages, there is no explanation of how these factors affected his calculations, if at all. As the United States Supreme Court has said: "Nothing in either *Daubert* or the Federal Rules of

Page 258

Evidence requires a ... court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997) (cited with approval by *Gammill*, 972 S.W.2d at 727).

Helton argues that other cases hold that plaintiffs in drainage cases can rely on data from existing wells to establish production of a hypothetical offset well. *See, e.g., Geo Viking, Inc. v. Tex-Lee Operating Co.*, 817 S.W.2d 357, 363 (Tex.App.-Texarkana 1991), *writ denied*, 839 S.W.2d 797 (Tex.1992) (per curiam); *Vega Petroleum Corp. v. Hovey*, 604 S.W.2d 388, 390 (Tex.Civ.App.-Eastland 1980, no writ); *Wes-Tex Land Co. v. Simmons*, 566 S.W.2d 719, 722-23 (Tex.Civ.App.-Eastland 1978, writ ref'd n.r.e.). Kerr-McGee does not dispute that data from existing wells may be considered in predicting a hypothetical well's production. But without knowing how Riley used that and other data to reach his conclusions in this case, we cannot determine whether Riley's analysis was reliable. Moreover, Riley failed to sufficiently explain why known differences in the wells, such as the thickness of the Lower Puryear reservoir encountered, would not result in different production rates.

In sum, even if the data Riley used is the type generally relied on by petroleum engineers to estimate production, and even if the underlying facts and data Riley used are accurate, there is simply too great an analytical gap between the data and Riley's conclusions for the conclusions to be reliable and therefore some evidence. Because Riley's testimony regarding the amount of damages is incompetent, there is no evidence to support the amount of damages awarded by the trial court. Accordingly, we reverse the court of appeals' judgment.

IV

Finally, we consider Helton's request that, in the

interest of justice, the case be remanded to the trial court.[6] Texas Rule of Appellate Procedure 60.3 provides: "When reversing the court of appeals' judgment, the Supreme Court may, in the interest of justice, remand the case to the trial court even if a rendition of judgment is otherwise appropriate." TEX. R. APP. P. 60.3.

"As a general matter, when we sustain a no evidence point of error after a trial on the merits, we render judgment on that point." *Holt Atherton Indus., Inc. v. Heine*, 835 S.W.2d 80, 86 (Tex.1992) (citing *Mobil Oil Corp. v. Frederick*, 621 S.W.2d 595, 596 (Tex.1981); *Nat'l Life & Accident Ins. Co. v. Blagg*, 438 S.W.2d 905, 909 (Tex.1969); *Garza v. Alviar*, 395 S.W.2d 821, 823 (Tex.1965)).

"The most compelling case for [a remand in the interest of justice] is where we overrule existing precedents on which the losing party relied at trial." *Westgate, Ltd. v. State*, 843 S.W.2d 448, 455 (Tex.1992). Accordingly, we have remanded in the interest of justice when precedent has been overruled or the applicable law has otherwise changed between the time of trial and the disposition of the appeal. *See, e.g., Twyman v. Twyman*, 855 S.W.2d 619, 626 (Tex.1993) (remand in interest of

Page 259

justice because case was tried on legal theory overruled by Court); *Caller-Times Publ'g Co., Inc. v. Triad Communications, Inc.*, 826 S.W.2d 576, 588 (Tex.1992) (remand in interest of justice because Court announced new liability standard).

In support of the requested remand, Helton cites *Amarillo Oil Co. v. Energy-Agri Products, Inc.*, 794 S.W.2d 20 (Tex.1990), a case in which we remanded in the interest of justice after concluding that the injunction sought by the plaintiff was not an available remedy. We did so because "our reported cases did not resolve the conflicting lines of cases as to whether injunctive relief should be allowed" and our decision in *Amarillo Oil* "clarified the law." *Id.* at 28. In contrast, our decision in this case does not foreclose or restrict either the remedy sought by Helton (money damages) or the measure of damages chosen by Helton (royalties that the hypothetical offset well would have yielded). Moreover, our decision does not modify the evidentiary standard for recovery of damages in a suit against a lessee for breach of the implied covenant to protect the leasehold from drainage. We concluded that Riley's testimony was unreliable by applying our established jurisprudence regarding expert testimony. Because our decision does not modify any legal precept, a remand in the interest of justice cannot be justified on that basis.

Helton also summarily asserts that a remand in the interest of justice is appropriate because Helton relied on the trial court's admission of Riley's testimony and

exhibits.[7] However, Kerr-McGee's timely motion to strike Riley's testimony during Helton's case-in-chief, Kerr-McGee's motion for judgment as a matter of law filed at the close of Helton's case-in-chief, and Kerr-McGee's motion for judgment filed after the close of all the evidence but before judgment was announced placed Helton on notice that Kerr-McGee was preserving error for an appeal challenging the legal sufficiency of Riley's testimony and exhibits. Furthermore, Helton had an opportunity to bolster Riley's testimony and exhibits on redirect and upon recalling him. Helton's conclusory assertion of reliance is clearly insufficient to justify a remand in the interest of justice.

The United States Supreme Court recently observed: "It is implausible to suggest, post- *Daubert*, that parties will initially present less than their best expert evidence in the expectation of a second chance should their first try fail." *Weisgram v. Marley Co.*, 528 U.S. 440, 455, 120 S.Ct. 1011, 145 L.Ed.2d 958 (2000) (holding that authority of federal courts of appeals to direct entry of judgment extends to cases in which, on excision of expert testimony erroneously admitted, there remains insufficient evidence to support the verdict). We agree with that observation. The exacting standards for expert testimony set forth by the United States Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993), *General Electric Co. v. Joiner*, 522 U.S. 136, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997), and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 119 S.Ct. 1167, 143 L.Ed.2d 238 (1999), and by this Court in *E.I. du Pont de Nemours & Co., Inc. v. Robinson*, 923 S.W.2d 549 (Tex.1995), *Merrell Dow Pharmaceuticals, Inc. v. Havner*, 953 S.W.2d 706 (Tex.1997), and *Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713 (Tex.1998) are well-known to Texas litigators.

Page 260

Helton had more than two years to prepare for the trial and does not contest Kerr-McGee's assertion that, before trial, Kerr-McGee "produced all of their records for wells in the West Park Field, including geological records, well records, well logs, Railroad Commission reports, pressure and production records, etc." In addition, Helton had four trial days following Riley's direct testimony in which to put on additional damages evidence in response to Kerr-McGee's objections, but did not do so.

Both liability and damages were vigorously contested by the parties in the trial court. A remand allowing Helton to redo or supplement Riley's damages testimony would, without sufficient justification, provide Helton "an opportunity for another 'bite at the apple.'" *Jackson v. Ewton*, 411 S.W.2d 715, 719 (Tex.1967). Moreover, a remand would force Kerr-McGee, who presented four expert witnesses at the week-long trial, to bear the time and expense of additional proceedings when

it was Helton that failed to bring forth competent evidence to support an essential element of the pleaded cause of action despite ample opportunity to do so.

We decline, under the circumstances of this case, to exercise our discretion to remand in the interest of justice. Accordingly, pursuant to Texas Rule of Appellate Procedure 60.2(c), we render judgment that Helton take nothing.

Justice HECHT filed a concurring opinion, in which Justice WAINWRIGHT joined.

Justice O'NEILL did not participate in the decision.

Page 261

WEST PARK FIELD AREA

TABULAR OR GRAPHIC MATERIAL SET AT THIS POINT IS NOT DISPLAYABLE

Justice HECHT, joined by Justice WAINWRIGHT, concurring.

I join in the Court's opinion with this clarification. I agree that there was an "analytical gap"[1] in Riley's testimony: his

Page 262

factual premises--basically, the geology of the Lower Puryear, the characteristics of other wells producing in that formation, and the factors affecting a well's production--do not appear to support his conclusion that the additional well he hypothesized Kerr-McGee should have drilled would have produced at the same rate as the Holmes 17-1 and the Fleetwood Trust 16-1 wells. For example, Riley believed that the hypothesized well would have encountered only a 60' zone of production, shallower than the 73' zone in the Holmes 17-1 well and the 79' zone in the Fleetwood Trust 16-1 well, and that production would be affected by the depth of the zone, yet he did not square these premises with his conclusion that the three wells would produce at equal rates except to say that it was possible that other factors in each well might have affected production differently. This failure, however, indicates a deeper flaw in Riley's testimony. Even if he had testified to some lesser level of production from the hypothesized well, it is far from clear that his prediction could ever be much more than a guess, and a guess is not admissible evidence, even if made by an expert. Kerr-McGee drilled nine wells trying to hit the Lower Puryear. Two were successful, and a third was marginally profitable. If an expert could reliably have predicted where to drill, and if Kerr-McGee would have preferred to drill only profitable wells, then surely it would have acquired that expert's advice instead of drilling six unsuccessful wells at considerable cost. Reliability does not mean one thing outside the courtroom and something less inside. If the industry

would rely on expert analysis like Riley's to determine where to drill, then it was reliable for purposes of the trial. If not, it should not have been admitted.

Notes:

[1] On September 17, 1996, Kerr-McGee Corporation assigned its interest in the sixty-one leases to Kerr-McGee North American Onshore Corporation. On December 31, 1996, Kerr-McGee North American Onshore Corporation merged with Devon Energy Corporation (Nevada). The successor entity was Devon Energy Production Company, L.P. These entities, the petitioners, will be referred to collectively as "Kerr-McGee."

[2] A map of the West Park Field is attached.

[3] 16 TEX. ADMIN. CODE § 3.37 ("[N]o well shall be drilled nearer than 467 feet to any property line, lease line, or subdivision line....").

[4] A tenth well, the Eden 1-01, was drilled in section 1 by another operator.

[5] The trial court also awarded \$190,068.75 in prejudgment interest from January 8, 1999 through April 12, 2001, and \$378,900.00 in attorney's fees, for a total of \$1,432,618.11 in damages.

[6] Helton states: "In the event this Court grants review, finds that Kerr-McGee did not waive its objection to the reliability of Riley's damages testimony, and finds that the evidence does not support the trial court's damages determination, Plaintiffs request the court to remand for a damages determination in the interest of justice under T.R.A.P. 60.3."

[7] Helton states: "Plaintiffs relied on the fact that Riley's damages testimony and damages exhibits were admitted without objection. *Ellis*, 971 S.W.2d at 409 (the Court should not render judgment when the plaintiff relies on evidence being admitted)."

[1] *See Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713, 727 (Tex.1998) (indicating that a test for reliability under Rule 702 of the Texas Rules of Evidence is "whether 'there is simply too great an analytical gap between the data and the opinion proffered,' " quoting *General Elec. Co. v. Joiner*, 522 U.S. 136, 146, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997)).
